



De Sesame Motor PGCH in-line planetaire tandwielkasten combineren topprestaties met een uitstekende prijs-kwaliteitverhouding. Door de enkelvoudige kast biedt ze een hoger koppel, meer precisie, een hogere belastingcapaciteit en een stillere werking.

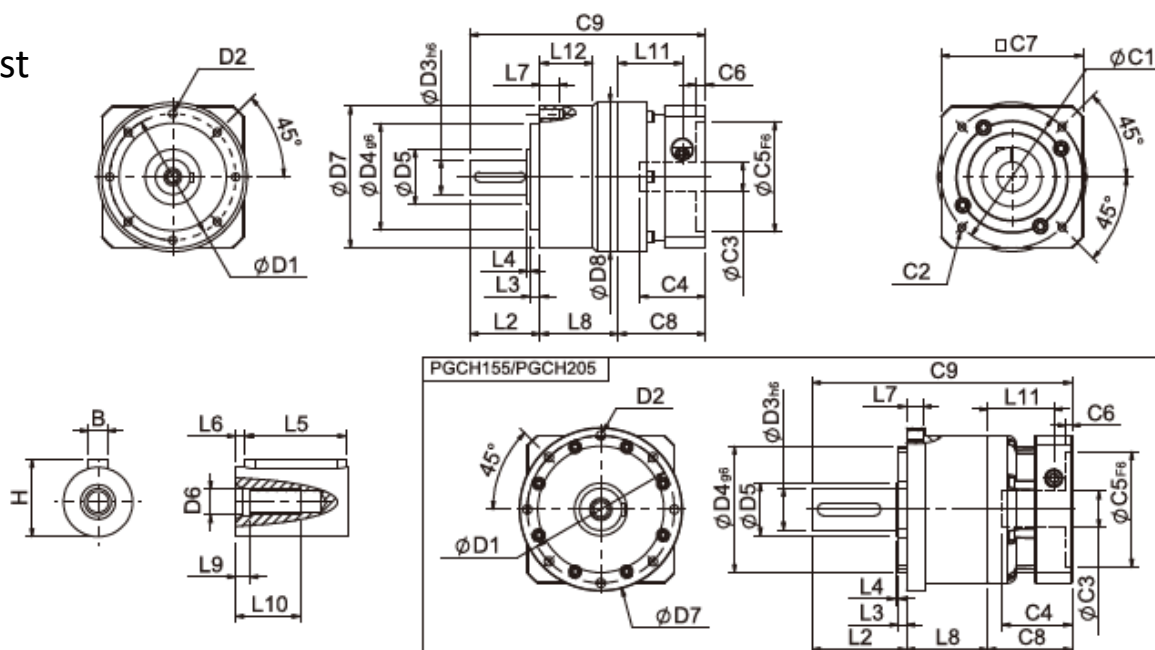
De PGCH-serie bestaat uit hoogwaardige tandwielen en componenten. Dit maakt een compacte en robuuste constructie met minimale speling en een onderhoudsvrije werking. Beschikbaar in drie precisieniveaus en met een maximale behuizingsmaat van 235 mm. Geschikt voor alle servomotoren.

- ⊙ Enkele planeetdrager/uitgaande as, hoge torsiestijfheid en belastingcapaciteit.
- ⊙ Compacte enkele ring gear, hoge precisie en hoog uitgaand koppel.
- ⊙ Alloy steel precisietandwielen, lage speling, laag geluidsniveau en hoge slijtvastheid.
- ⊙ Gesmeerd voor levensduur en IP65-afdichting, onderhoudsvrij.
- ⊙ Adapters voor alle servomotoren.

## Specificaties

|                         |                                 |
|-------------------------|---------------------------------|
| Framemaat               | 50, 70, 90, 120, 155, 205, 235  |
| Ratio's                 | 3:1 - 100-:1                    |
| Nominale snelheid (rpm) | 2.000 - 5.000                   |
| Maximale snelheid (rpm) | 3.500 - 10.000                  |
| Speling (boogminuten)   | 1 stage: 3-8 ; 2 stages: 5 - 10 |
| Geluidsniveau (dBA/1m)  | 58 - 70                         |

## Enkele kast



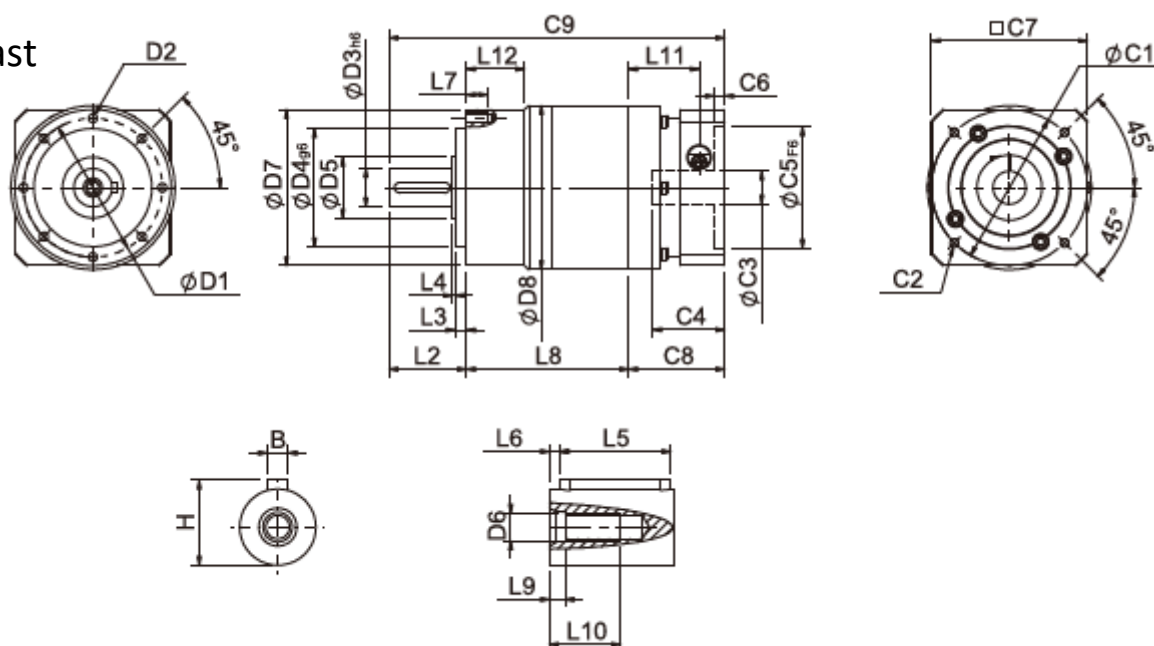
\* C1-C9 zijn motorspecifieke afmetingen (metrische standaard getoond). Afmetingen kunnen variëren afhankelijk van de motorflens.

\* Specificaties kunnen zonder voorafgaande kennisgeving worden gewijzigd.

## Specificaties

Eenheid: mm

| Dimensions                    | PGCH50  | PGCH70  | PGCH90   | PGCH120     | PGCH155  | PGCH205   | PGCH235   |
|-------------------------------|---------|---------|----------|-------------|----------|-----------|-----------|
| D1                            | 44      | 62      | 80       | 108         | 140      | 184       | 210       |
| D2                            | M4x0.7P | M5x0.8P | M6x1.0P  | M8x1.25P    | M10x1.5P | M12x1.75P | M16x2.0P  |
| D3 <sub>h6</sub>              | 12      | 16      | 22       | 32          | 40       | 55        | 75        |
| D4 <sub>g6</sub>              | 35      | 52      | 68       | 90          | 120      | 160       | 180       |
| D5                            | 15      | 25      | 35       | 45          | 50       | 70        | 114.5     |
| D6                            | M4x0.7P | M5x0.8P | M8x1.25P | M12x1.75P   | M16x2.0P | M20x2.5P  | M20x2.5P  |
| D7                            | 50      | 70      | 90       | 120         | 155      | 205       | 235       |
| D8                            | 50      | 70      | 94.5     | 120         | -        | -         | 253       |
| L2                            | 24.5    | 36      | 44.5     | 60          | 89.5     | 96.5      | 126       |
| L3                            | 4       | 6       | 6.5      | 7           | 8        | 12        | 18        |
| L4                            | 1       | 1.5     | 1.5      | 3.5         | 2.5      | 2.5       | 3         |
| L5                            | 15      | 25      | 32       | 40          | 60       | 70        | 90        |
| L6                            | 2       | 2       | 3        | 5           | 5        | 6         | 7         |
| L7                            | 8       | 10      | 12       | 16          | 16       | 20        | 28        |
| L8                            | 29.8    | 38      | 49.5     | 60          | 77.5     | 98        | 124       |
| L9                            | 4       | 4       | 4.5      | 6           | 6        | 8         | 15        |
| L10                           | 12      | 16.5    | 20.5     | 30          | 38       | 48        | 42        |
| L11                           | 29      | 35.4    | 40.7     | 53.7        | 63       | 69.5      | 95        |
| L12                           | -       | -       | 33.5     | -           | -        | -         | 70        |
| C1 <sup>2</sup>               | 46      | 70      | 90       | 115         | 145      | 200       | 235       |
| C2 <sup>2</sup>               | M4x0.7P | M5x0.8P | M6x1.0P  | M8x1.25P    | M8x1.25P | M12x1.75P | M12x1.75P |
| C3 <sup>2</sup>               | ≤8/≤11  | ≤14/≤19 | ≤19/≤24  | ≤24/≤32/≤38 | ≤35/≤38  | ≤50       | ≤55       |
| C4 <sup>2</sup>               | 26.5    | 37.6    | 41.4     | 51.3        | 66.5     | 77        | 112       |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 50      | 70       | 95          | 110      | 114.3     | 200       |
| C6 <sup>2</sup>               | 4.1     | 4.5     | 6        | 6           | 5.5      | 6         | 6         |
| C7 <sup>2</sup>               | 42      | 60      | 90       | 115         | 140      | 180       | 220       |
| C8 <sup>2</sup>               | 38.1    | 46.5    | 55.4     | 70          | 80       | 90        | 120       |
| C9 <sup>2</sup>               | 92.4    | 120.5   | 149.4    | 190         | 247      | 284.5     | 370       |
| B                             | 5       | 5       | 6        | 10          | 12       | 16        | 20        |
| H                             | 13.5    | 18      | 24.5     | 35          | 43       | 59        | 79.5      |

**Dubbele kast**


\* C1-C9 zijn motorspecifieke afmetingen (metrische standaard getoond). Afmetingen kunnen variëren afhankelijk van de motorflens.

\* Specificaties kunnen zonder voorafgaande kennisgeving worden gewijzigd.

**Specificaties**
**Eenheid: mm**

| Dimensions                    | PGCH50  | PGCH70  | PGCH90   |
|-------------------------------|---------|---------|----------|
| D1                            | 44      | 62      | 80       |
| D2                            | M4x0.7P | M5x0.8P | M6x1.0P  |
| D3 <sub>h6</sub>              | 12      | 16      | 22       |
| D4 <sub>g6</sub>              | 35      | 52      | 68       |
| D5                            | 15      | 25      | 35       |
| D6                            | M4x0.7P | M5x0.8P | M8x1.25P |
| D7                            | 50      | 70      | 90       |
| D8                            | 50      | 70      | 94.5     |
| L2                            | 24.5    | 36      | 44.5     |
| L3                            | 4       | 6       | 6.5      |
| L4                            | 1       | 1.5     | 1.5      |
| L5                            | 15      | 25      | 32       |
| L6                            | 2       | 2       | 3        |
| L7                            | 8       | 10      | 12       |
| L8                            | 56.8    | 71      | 93.5     |
| L9                            | 4       | 4       | 4.5      |
| L10                           | 12      | 16.5    | 20.5     |
| L11                           | 29      | 35.4    | 40.7     |
| L12                           | -       | -       | 33.5     |
| C1 <sup>2</sup>               | 46      | 70      | 90       |
| C2 <sup>2</sup>               | M4x0.7P | M5x0.8P | M6x1.0P  |
| C3 <sup>2</sup>               | ≤8/≤11  | ≤14/≤19 | ≤19/≤24  |
| C4 <sup>2</sup>               | 26.5    | 37.6    | 41.4     |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 50      | 70       |
| C6 <sup>2</sup>               | 4.1     | 4.5     | 6        |
| C7 <sup>2</sup>               | 42      | 60      | 90       |
| C8 <sup>2</sup>               | 38.1    | 46.5    | 55.4     |
| C9 <sup>2</sup>               | 119.4   | 153.5   | 193.4    |
| B                             | 5       | 5       | 6        |
| H                             | 13.5    | 18      | 24.5     |

## Specifications

| Specifications                   |               | Stage                                                                                                | Ratio  | PGCH-50                              | PGCH-70  | PGCH-90             | PGCH-120            | PGCH-155  | PGCH-205  | PGCH-235  |           |
|----------------------------------|---------------|------------------------------------------------------------------------------------------------------|--------|--------------------------------------|----------|---------------------|---------------------|-----------|-----------|-----------|-----------|
| Nominal Output Torque $T_{2N}$   | N·m           | 1                                                                                                    | 3      | 19                                   | 53       | 145                 | 290                 | 520       | 950       | 1100      |           |
|                                  |               |                                                                                                      | 4      | 20                                   | 55       | 150                 | 300                 | 550       | 1000      | 1700      |           |
|                                  |               |                                                                                                      | 5      | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 6      | 15                                   | 46       | 135                 | 310                 | 560       | 1000      | 1900      |           |
|                                  |               |                                                                                                      | 7      | 14                                   | 44       | 125                 | 300                 | 530       | 900       | 1800      |           |
|                                  |               |                                                                                                      | 8      | 12                                   | 41       | 110                 | 260                 | 480       | 900       | 1600      |           |
|                                  |               |                                                                                                      | 9      | 11                                   | 37       | 95                  | 230                 | 430       | 800       | 1500      |           |
|                                  |               |                                                                                                      | 10     | 11                                   | 37       | 95                  | 230                 | 430       | 800       | 1500      |           |
|                                  |               | 2                                                                                                    | Stage  | Ratio                                | PGCH- 50 | PGCH-70<br>PGCH-70T | PGCH-90<br>PGCH-90T | PGCH-120T | PGCH-155T | PGCH-205T | PGCH-235T |
|                                  |               |                                                                                                      | 15     | 19                                   | 53       | 145                 | 290                 | 520       | 950       | 2000      |           |
|                                  |               |                                                                                                      | 20     | 20                                   | 55       | 150                 | 300                 | 550       | 1000      | 2000      |           |
|                                  |               |                                                                                                      | 25     | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 30     | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 35     | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 40     | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 45     | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 50     | 17                                   | 54       | 140                 | 330                 | 600       | 1050      | 2000      |           |
|                                  |               |                                                                                                      | 60     | 15                                   | 46       | 135                 | 310                 | 560       | 1000      | 2000      |           |
|                                  |               |                                                                                                      | 70     | 14                                   | 44       | 125                 | 300                 | 530       | 960       | 1900      |           |
|                                  |               |                                                                                                      | 80     | 12                                   | 41       | 110                 | 260                 | 480       | 900       | 1800      |           |
|                                  |               |                                                                                                      | 90     | 11                                   | 37       | 95                  | 230                 | 430       | 800       | 1600      |           |
|                                  |               |                                                                                                      | 100    | 11                                   | 37       | 95                  | 230                 | 430       | 800       | 1500      |           |
| Emergency Stop Torque $T_{2NOT}$ | N · m         | (3.0 times of Nominal Output Torque)<br>(*Max. Output Torque $T_{2B}$ =60% of Emergency Stop Torque) |        |                                      |          |                     |                     |           |           |           |           |
| Nominal Input Speed $n_{1N}$     | rpm           | 1,2                                                                                                  | 3-100  | 5000                                 | 4000     | 4000                | 4000                | 3000      | 2500      | 2000      |           |
| Max. Input Speed $n_{1max}$      | rpm           | 1,2                                                                                                  | 3-100  | 10000                                | 8000     | 8000                | 8000                | 5000      | 4000      | 3500      |           |
| Micro Backlash P0                | arcmin        | 1                                                                                                    | 3-10   | ≤ 4                                  | ≤ 4      | ≤ 4                 | ≤ 3                 | ≤ 3       | ≤ 3       | ≤ 3       |           |
|                                  |               | 2                                                                                                    | 12-100 | ≤ 6                                  | ≤ 6      | ≤ 6                 | ≤ 5                 | ≤ 5       | ≤ 5       | ≤ 5       |           |
| Precision Backlash P1            | arcmin        | 1                                                                                                    | 3-10   | ≤ 6                                  | ≤ 6      | ≤ 6                 | ≤ 5                 | ≤ 5       | ≤ 5       | ≤ 5       |           |
|                                  |               | 2                                                                                                    | 12-100 | ≤ 8                                  | ≤ 8      | ≤ 8                 | ≤ 7                 | ≤ 7       | ≤ 7       | ≤ 7       |           |
| Standard Backlash P2             | arcmin        | 1                                                                                                    | 3-10   | ≤ 8                                  | ≤ 8      | ≤ 8                 | ≤ 7                 | ≤ 7       | ≤ 7       | ≤ 7       |           |
|                                  |               | 2                                                                                                    | 12-100 | ≤ 10                                 | ≤ 10     | ≤ 10                | ≤ 9                 | ≤ 9       | ≤ 9       | ≤ 9       |           |
| Torsional Rigidity               | N · m /arcmin | 1,2                                                                                                  | 3-100  | 3                                    | 7        | 14                  | 25                  | 50        | 145       | 300       |           |
| Max. Radial Load $F_{2rB}^1$     | N             | 1,2                                                                                                  | 3-100  | 702                                  | 1377     | 2985                | 6100                | 7140      | 11050     | 28000     |           |
| Max. Axial Load $F_{2aB}^1$      | N             | 1,2                                                                                                  | 3-100  | 410                                  | 765      | 1625                | 3350                | 4670      | 6460      | 15000     |           |
| Operating Temp.                  | ℃             |                                                                                                      | 3-100  | -10℃ ~ +90℃                          |          |                     |                     |           |           |           |           |
| Service Life                     | hr            |                                                                                                      | 3-100  | 20,000 (10,000 Continuous operation) |          |                     |                     |           |           |           |           |
| Efficiency                       | %             | 1                                                                                                    | 3-10   | ≥ 97%                                |          |                     |                     |           |           |           |           |
|                                  |               | 2                                                                                                    | 12-100 | ≥ 94%                                |          |                     |                     |           |           |           |           |
| Weight                           | kg            | 1                                                                                                    | 3-10   | 0.6                                  | 1.3      | 3.5                 | 7.8                 | 16.1      | 27        | 55        |           |
|                                  |               | 2                                                                                                    | 12-100 | 0.9                                  | 2.0(1.6) | 5.6(3.9)            | 8.7                 | 19        | 34        | 67        |           |
| Mounting Position                | -             | 1,2                                                                                                  | 3-100  | Any Direction                        |          |                     |                     |           |           |           |           |
| Noise Level <sup>2</sup>         | dBA/1m        | 1,2                                                                                                  | 3-100  | 58                                   | 58       | 60                  | 63                  | 65        | 67        | 70        |           |
| Protection Class                 | -             | 1,2                                                                                                  | 3-100  | IP65                                 |          |                     |                     |           |           |           |           |
| Lubrication                      | -             | 1,2                                                                                                  | 3-100  | Synthetic Lubricant                  |          |                     |                     |           |           |           |           |

| Stage | Ratio                 | unit                 | PGCH-50 | PGCH-70    | PGCH-90    | PGCH-120    | PGCH-155    | PGCH-205    | PGCH-235  |
|-------|-----------------------|----------------------|---------|------------|------------|-------------|-------------|-------------|-----------|
| 1     | 3                     | Kg · cm <sup>2</sup> | 0.03    | 0.23       | 0.97       | 2.35        | 10.00       | 30.50       | 79.50     |
|       | 4                     |                      | 0.02    | 0.18       | 0.67       | 1.66        | 7.17        | 25.86       | 58.21     |
|       | 5                     |                      | 0.02    | 0.17       | 0.65       | 1.50        | 6.52        | 23.63       | 54.36     |
|       | 6/7/8                 |                      | 0.02    | 0.14       | 0.60       | 1.45        | 6.17        | 22.92       | 54.12     |
|       | 9/10                  |                      | 0.02    | 0.14       | 0.58       | 1.41        | 6.10        | 22.73       | 53.98     |
| Stage | Ratio                 |                      | PGCH-50 | PGCH-70(T) | PGCH-90(T) | PGCH-120(T) | PGCH-155(T) | PGCH-205(T) | PGCH-235T |
| 2     | 15/20/25              |                      | 0.02    | 0.17(0.02) | 0.65(0.15) | 0.65        | 1.50        | 6.25        | 30.50     |
|       | 30/35/40              |                      | 0.02    | 0.14(0.02) | 0.60(0.14) | 0.60        | 1.45        | 6.17        | 22.92     |
|       | 45/50/60/70/80/90/100 |                      | 0.02    | 0.14(0.02) | 0.58(0.14) | 0.58        | 1.41        | 6.10        | 22.73     |